

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

DRAFT

Conditional Major, Operating

Permit: F-07-041

Modern Welding Company of Owensboro, Inc.

Elizabethtown, KY 42701

August 6, 2007

Rita Arguello, Reviewer: Min Wang

SOURCE ID: 21-093-00080

AGENCY INTEREST: 5236

ACTIVITY: APE20070001

SOURCE DESCRIPTION:

Modern Welding Company of Elizabethtown fabricates metal storage tanks. Modern Welding purchases metal to form the storage tanks. The steel is formed and welded. After fabrication, the tanks are gritblasted and coated with paint or a fiberglass coating.

COMMENTS (RENEWAL):

This permit renewal has updated the maximum capacity production rate, and incorporated the fugitive regulations of 401 KAR 63:010 for the welding operations (EP01).

Modern Welding manufacture customize surface coating steel products, therefore the paints vary with the products. The worst-case scenario has been used for the potential to emit calculations.

In Section D, detailed Compliance Demonstration Methods have been added.

The welding operations are comprised of various welding machines located in the plant. The majority of the welders are Miller welders, in addition to a few Lincoln welders. 401 KAR 59:010, New process operations, applies to the welding operations. Pursuant to 401 KAR 59:010, emissions from the welding operations shall be less than 2.34 lb/hr, each. Also, visible emissions from each facility shall not be equal or greater than 20% opacity. In order to comply with these requirements, a mobile x-arm welding fume exhaust/filtration system must be in place when welding using welding material containing chromium and nickel.

Emissions from the surface coating and fiberglass coating are subject to 401 KAR 59:010, New process operations. The particulate matter emissions from the surface coating operations shall not exceed 2.34 lb/hr. Also, visible emissions shall not equal or exceed 20% opacity. To preclude Title V and the applicability of 401 KAR 59:225, New miscellaneous metal parts and products surface coating operations, Modern Welding requests operating and emission limitations to restrict the plantwide VOC usage and emission rates to be less than 90 tons per year. Also to preclude Title V applicability, the emissions of combined hazardous air pollutants shall not equal or exceed 22.5 tons per year, and the emissions of an individual hazardous air pollutant shall not equal or exceed 9 tons per year.

The sandblasting/grit blasting is considered by the Division as an insignificant activity. However,

401 KAR 59:010, New process operations, applies to the grit blasting operation.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations.

401 KAR 63:010, Fugitive emissions.

401 KAR 52:030 Federally-enforceable permits for non-major sources.

EMISSION AND OPERATING CAPS DESCRIPTION:

1. Volatile organic compound (VOC) emissions shall not exceed 90 tons per year based on a 12 month rolling total for the entire source to preclude a major source Title V review.
2. Hazardous air pollutants (HAPs) emissions shall not exceed 9 tons per year individually and 22.5 tons per year combined based on a rolling 12-month total for the entire source to preclude a major source Title V review.
3. A mobile x-arm welding or Widdervac 70600 fume exhaust/filtration system must be in place when welding using welding material containing chromium and nickel takes place.

CREDIBLE EVIDENCE:

This permit contains provisions, which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.